AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A communication management method for a random access communication network, the method comprising:

by a gateway of the random access communication network, dividing time intervals into time slots each associated with an access time slot during which a terminal can send an access request to the network, and of selected width greater than or equal to the duration of an access request and then divide those time intervals into sub-intervals including at least two consecutive time slots and prohibit the terminals from sending access requests during at least one of the access time slots associated with the time slots of each sub-interval at the same time as authorizing them to do so during non-prohibited access time slots,

defining in each sub-interval a number, at least equal to the number of time slots that said sub-interval contains, of processing time windows offset in time and of width substantially equal to that of a time slot, and

deducing from the window to which a received access request belongs at least one access delay of the requesting terminal relative to a reference and then sending an acknowledgement message to that requesting terminal at a moment selected as a function of that access delay so that said requesting terminal can receive said acknowledgement message in a predefined acknowledgement time interval.

2. (previously presented): The method according to claim 1, wherein a reception time of a message transmitted by a terminal consecutively to the reception of an acknowledgement message sent in response to an access request associated with said message is deduced from said access delay.

3. (previously presented): The method according to claim 1, wherein said access delay is stored in corresponding relationship to an identifier of the requesting terminal so as to be able to time the reception of each message sent by said terminal.

4. (previously presented): The method according to claim 1, wherein said number of time slots of a sub-interval is selected so that said sub-interval corresponds to the maximum spread of the access delays of the terminals in a coverage area of said network.

5. (previously presented): The method according to claim 1, wherein said number of time slots of a sub-interval is equal to three.

6. (previously presented): The method according to claim 5, wherein the use of two consecutive time slots of three time slots in each sub-interval is prohibited.

7. (previously presented): The method according to claim 1, wherein at least certain of said processing time windows have a common limit.

8. (previously presented): The method according to claim 1, wherein certain of said processing time windows have a time overlap.

9. (previously presented): The method according to claim 8, wherein said time overlap is substantially equal to 50%.

10. (previously presented): The method according to claim 1, wherein said time interval is equal to n times the duration of a radio frame constituting said message associated with an access request, n being greater than or equal to 1.

11. (previously presented): The method according to claim 1, wherein signals representing said access requests are received in parallel over each of the processing time windows of the sub-intervals so as to deduce in parallel respective windows to which said received signals belong from the access delays of the requesting terminals relative to said reference, after which acknowledgement messages are sent to said requesting terminals at times selected as a function of their respective access delays, so that said requesting terminals are able to receive said acknowledgement messages in said predefined acknowledgement time interval.

12. (previously presented): The method according to claim 1, wherein signals representing said access requests are received throughout the duration of each sub-interval and an access delay is associated with each access request received during said sub-interval as a function of the processing time window during which said access request was received, after which acknowledgement messages are sent to said requesting terminals at times selected as a

function of their respective access times so that said requesting terminals can receive said acknowledgement messages in said pre defined acknowledgement time interval.

13. (currently amended): A communication management device for a base station of a random access communication network, ~~wherein~~ the communication management device ~~comprises~~ comprising:

a processing means which:

divides time intervals into time slots each associated with an access time slot during which a terminal is able to send an access request to the network and of selected width greater than or equal to the duration of an access request,

divides said time intervals into sub-intervals including at least two consecutive time slots,

designates in each sub-interval at least one prohibited time slot associated with an access time slot during which the terminals are prohibited from sending their access requests to the network,

defines in each sub-interval a number, at least equal to the number of time slots that said sub-interval contains, of processing time windows offset in time and of width substantially equal to that of a time slot, and

in the event of reception of an access request sent by a requesting terminal, deduces from the window to which said access request belongs at least one access delay of the requesting terminal relative to a reference and then to determine from said access delay a time of sending an acknowledgement message to said requesting terminal so that

said requesting terminal is able to receive said acknowledgement message in a predefined acknowledgement time slot; and

a memory which stores the at least one access delay deduced by the processing means.

14. (previously presented): The device according to claim 13, wherein said processing means determines from said access delay a time of receiving a message sent by a terminal consecutively to the receipt of an acknowledgement message sent in response to an access request associated with said message.

15. (currently amended): The device according to claim 13, wherein the ~~device comprises a~~ memory, on the instructions of said processing means, ~~which~~ stores each deduced access delay in corresponding relationship to an identifier of the requesting terminal and said processing means instructs the receive timing of said base station to be locked to each message sent by a terminal as a function of the access delay associated with an identifier of the terminal in said memory.

16. (previously presented): The device according to claim 13, wherein said number of time slots of a sub-interval is selected so that said sub-interval corresponds to the maximum spread of the access delays of the terminals situated in a coverage area of said network.

17. (previously presented): The device according to claim 13, wherein said number of time slots of a sub-interval is equal to three.

18. (previously presented): The device according to claim 17, wherein said processing means designates on command two consecutive prohibited access time slots of three time slots in each sub-interval.

19. (previously presented): The device according to claim 13, wherein said processing means defines at least certain of said processing time windows so that pairs of said processing windows have a common limit.

20. (previously presented): The device according to claim 13, wherein said processing means defines at least certain of said processing time windows so that said processing time windows have a time overlap.

21. (previously presented): The device according to claim 20, wherein said time overlap is substantially equal to 50%.

22. (previously presented): The device according to claim 13, wherein said time interval is equal to n times the duration of a radio frame constituting said message associated with an access request, n being greater than or equal to one.

23. (previously presented): The device according to claim 13, wherein said processing means receives signals representing said access requests in parallel over each of the processing time windows of the sub-intervals so as to deduce in parallel respective windows to which said received signals belong from the access delays of the requesting terminals relative to

said reference, and then to command the sending of acknowledgement messages to said requesting terminals at times selected as a function of said requesting terminals respective access delays, so that said requesting terminals are able to receive said acknowledgement messages in said predefined acknowledgement time interval.

24. (previously presented): The device according to claim 13, wherein said processing means receives signals representing said access requests throughout the duration of each sub-interval and then to associate an access delay with each access request received during said sub-interval as a function of the processing time window during which said access request was received, and then to command the sending of acknowledgement messages to said requesting terminals at times selected as a function of said requesting terminals respective access delays so that said requesting terminals can receive said acknowledgement messages in said predefined acknowledgement time interval.

25. (previously presented): A base station for a random access communication network, comprising a communication management device, wherein said communication management device comprises a processing means which:

divides time intervals into time slots each associated with an access time slot during which a terminal is able to send an access request to the network and of selected width greater than or equal to the duration of an access request,

divides said time intervals into sub-intervals including at least two consecutive time slots,

designates in each sub-interval at least one prohibited time slot associated with an access time slot during which the terminals are prohibited from sending their access requests to the network,

defines in each sub-interval a number, at least equal to the number of time slots that said sub-interval contains, of processing time windows offset in time and of width substantially equal to that of a time slot, and

in the event of reception of an access request sent by a requesting terminal, deduces from the window to which said access request belongs at least one access delay of the requesting terminal relative to a reference and then to determine from said access delay a time of sending an acknowledgement message to said requesting terminal so that said requesting terminal is able to receive said acknowledgement message in a predefined acknowledgement time slot.

26. (currently amended): The method according to claim 1, wherein the random access communication network is a third generation ~~3G~~(3G) ~~type~~ communication network having a 3G ~~type~~ communication terminal.

27. (currently amended): The method according to claim 26, wherein said 3G communication terminal is a UMTS ~~type~~ 3G communication terminal operating in frequency duplex mode.

28. (previously presented): The method according to claim 26, wherein said random access communication network includes a satellite.

29. (previously presented): The method according to claim 26, wherein said random access communication network is a random access communication networks including a radio relay station coupled to a base station.

30. (currently amended): The device according to claim 13, wherein the random access communication network is a ~~3G~~ third generation (3G) ~~type~~ communication network having a 3G ~~type~~ communication terminal.

31. (currently amended): The base station according to claim 25, wherein the random access communication network is a ~~3G~~ third generation (3G) ~~type~~ communication network having a 3G ~~type~~ communication terminal.